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**CLEAN SET OF CLAIMS FOR US SN 09/090,754 (FORDHAM UNIVERSITY)**

60. A method of purifying heat shock protein-70 peptide complexes from a cell comprising:
- (a) homogenizing the cell with a hypotonic buffer solution to produce a cell lysate;
  - (b) centrifuging the cell lysate to obtain a supernatant;
  - (c) running the supernatant over an ADP-agarose column;
  - (d) washing the ADP-agarose column with a buffer containing ADP; and
  - (e) collecting the heat shock protein 70-peptide complexes.
61. A method of purifying heat shock protein-70 peptide complexes comprising:
- (a) contacting a sample containing cellular proteins with a nonhydrolyzable analog of ATP affixed to a solid substrate under conditions such that heat shock protein 70 in the sample can bind to the nonhydrolyzable analog of ATP; and
  - (b) eluting the heat shock protein 70 bound to the nonhydrolyzable analog of ATP in step (a).
62. A method for purifying heat shock protein 70 complexes comprising the steps of:
- adding a solution containing a heat shock protein 70 complex comprising a heat shock protein 70 associated with at least one member of the group consisting of peptides and proteins, to an ADP matrix column containing an ADP matrix to bind the heat shock protein 70 complexes to the ADP matrix; and
- adding a buffer containing ADP to the column to remove the heat shock protein

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70 complexes in an elution product.

63. The method of Claim 62 wherein the solution containing heat shock protein 70 complexes comprises a cell lysate.

64. The method of Claim 62 wherein the heat shock protein 70 complexes comprise complexes in which the heat shock protein 70 comprises one of the group consisting of DnaK proteins from prokaryotes; Ssa, Ssb, and Ssc from yeast; hsp70, Grp75 and BiP(Grp78) from eukaryotes.

65. A method for synthesizing heat shock protein 70 complexes, comprising adding a heat shock protein 70 and an antigenic molecule selected from the group consisting of peptides and proteins, to a buffer containing ADP to allow the heat shock protein 70 to bind to the antigenic molecule and ADP to form a heat shock protein 70 complex.

66. The method of Claim 65, wherein the solution containing the heat shock protein 70, antigenic molecule and ADP is incubated at 37° C to induce heat shock protein 70 present in the solution to bind to peptides and proteins present in the solution to form heat shock protein 70 complexes.

67. The method of Claim 65, wherein the heat shock protein 70 comprises one of the group consisting of DnaK proteins from prokaryotes; Ssa, Ssb, and Ssc from yeast; hsp70, Grp75 and BiP(Grp78) from eukaryotes.

68. An ADP-heat shock protein 70-peptide complex in substantially purified form as indicated by apparent homogeneity upon electrophoresis in a polyacrylamide gel.

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69. The ADP-heat shock protein 70-peptide complex of Claim 68, wherein said heat shock protein 70 comprises one of the group consisting of DnaK proteins from prokaryotes; Ssa, Ssb, and Ssc from yeast; hsp70, Grp75 and BiP(Grp78) from eukaryotes.
70. Canceled
71. The ADP-heat shock protein 70-peptide complex of Claim 68, wherein said ADP-heat shock protein 70-peptide complex comprises a heat shock protein 70-peptide complex made in vitro.
72. The ADP-heat shock protein 70-peptide complex of Claim 71, wherein said heat shock protein 70-peptide complex comprises a heat shock protein 70 and a peptide from the same individual.
73. The ADP-heat shock protein 70-peptide complex of Claim 71, wherein said heat shock protein 70-peptide complex comprises a heat shock protein 70 from a first individual and a peptide from a second, different individual.
74. The ADP-heat shock protein 70-peptide complex of Claim 71, wherein said heat shock protein 70-peptide complex comprises a heat shock protein 70 from a first organism and a peptide from a second, different organism.
75. The ADP-heat shock protein 70-peptide complex of Claim 71, wherein said heat shock protein 70-peptide complex comprises a heat shock protein 70 from a first species and a peptide from a second, different species.

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76. The ADP-heat shock protein 70-peptide complex of Claim 68, wherein the ADP-heat shock protein 70-peptide complex is purified by the steps of:

adding a heat shock protein complex comprising a heat shock protein 70 associated with a peptide to an ADP matrix column containing an ADP matrix to bind the heat shock protein 70 complexes to the ADP matrix; and

adding a buffer containing ADP to the column to remove the heat shock protein 70-peptide complexes in an elution product.

77. The ADP-heat shock protein 70-peptide complex of Claim 68, wherein the ADP-heat shock protein 70-peptide complex is synthesized by adding a heat shock protein 70 and a peptide to a buffer containing ADP to allow the heat shock protein 70 to bind to the antigenic molecule and ADP to form a heat shock protein 70 complex.

78. The method of claim 62, wherein said member is a peptide.

79. The method of claim 65, wherein the antigenic molecule is a peptide.

80. The method of Claim 65, wherein the antigenic molecule is a peptide, and wherein the solution containing the heat shock protein 70, peptide and ADP is incubated at 37°C to induce heat shock protein 70 present in the solution to bind to the peptide present in the solution to form heat shock protein 70-peptide complexes.

81. The method of claim 76, wherein said member is a peptide.

82. An ADP-heat shock protein 70-protein complex in substantially purified form as indicated by apparent homogeneity upon electrophoresis in a polyacrylamide gel.

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83. The ADP-heat shock protein 70-protein complex of Claim 82, wherein said heat shock protein 70 comprises one of the group consisting of DnaK proteins from prokaryotes; Ssa, Ssb, and Ssc from yeast; hsp70, Grp75 and BiP(Grp78) from eukaryotes.
84. The ADP-heat shock protein 70-protein complex of Claim 83, wherein said ADP-heat shock protein 70-protein complex comprises a heat shock protein 70-protein complex made in vitro.
85. The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 and a protein from the same individual.
86. The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 from a first individual and a protein from a second, different individual.
87. The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 from a first organism and a protein from a second, different organism.
88. The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 from a first species and a protein from a second, different species.
89. The method of claim 62, wherein said member is a protein, wherein the heat shock protein 70 complex comprises a heat shock protein 70 associated with a protein, and

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wherein the heat shock protein 70-protein complex is made in vitro.

90. The method of Claim 60, wherein the heat shock protein-70 peptide complexes comprise complexes in which the heat shock protein 70 is selected from the group consisting of a DnaK protein from a prokaryote; and hsp70(p73), hsc70(p72), and BiP(Grp78) from a eukaryote.

91. The method of Claim 61, wherein the heat shock protein-70 peptide complexes comprise complexes in which the heat shock protein 70 is selected from the group consisting of a DnaK protein from a prokaryote; and hsp70(p73), hsc70(p72), and BiP(Grp78) from a eukaryote.

92. The method of Claim 62 wherein the heat shock protein 70 complexes include complexes in which the heat shock protein 70 comprises one of the group consisting of a DnaK protein from a prokaryote; and hsp70(p73), hsc70(p72), and BiP(Grp78) from a eukaryote.

93. The method of Claim 65, wherein the heat shock protein 70 comprises one of the group consisting of a DnaK protein from a prokaryote; and hsp70(p73), hsc70(p72), and BiP(Grp78) from a eukaryote.

94. The ADP-heat shock protein 70-peptide complex of Claim 68, wherein said heat shock protein 70 comprises one of the group consisting of a DnaK protein from a prokaryote; and hsp70(p73), hsc70(p72), and BiP(Grp78) from a eukaryote.

95. The ADP-heat shock protein 70-protein complex of Claim 82, wherein said heat shock protein 70 comprises one of the group consisting of a DnaK protein from a prokaryote; and hsp70(p73), hsc70(p72), and BiP(Grp78) from a eukaryote.